

PROCEEDINGS
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TWO NEW MURINE RODENTS

BY DAVID H. JOHNSON
United States National Museum

During the past two decades numerous collections of small mammals have come to the United States National Museum from eastern Asia and the islands of the Pacific Ocean. As is to be expected, many of the included specimens are murine rodents and a large proportion of these are in the complex group of genera of which *Rattus* forms the core. The newly acquired material helps in some instances to solve taxonomic problems presented by the earlier and smaller collections. In other instances, by presenting completely new species and subspecies such as the ones described below, it clearly indicates that we are yet some distance from the preliminary goal of listing all the taxa of this extraordinarily varied group of mammals.

The type specimen of the first form here described is from a large series of rodents collected on Ponape Island by the Pacific Island Rat Ecology Project of the Pacific Science Board. The second form is represented by a single specimen collected in Luzon as a by-product of a survey of animal-borne virus diseases conducted by the Graduate School of Public Health of the University of Pittsburgh.

***Rattus rattus mansorius*, new subspecies**

Type specimen: United States National Museum, No. 302027; adult female, skin and skull; collected 1 September 1955, by William B. Jackson, original No. 31.

Type locality: Kolonia, Ponape, Caroline Islands.

Diagnosis: A house rat resembling *Rattus rattus mindanensis* of the Philippine Islands in general, but differing from that subspecies in having less cinnamon color on upper parts, no brownish band across throat, and a narrower and relatively longer cranial rostrum.

Description: Color of type specimen—Upper parts Buffy Brown to Tawny-Olive, darkened in midback by numerous long black bristles, lightened on shoulders and sides by scattered whitish spines; no sharply

defined lateral line of demarcation between upper and lower color areas; underparts Smoke Gray with a faint Cinnamon wash, which is most pronounced in the median pectoral area; hind feet pale, each with a weakly defined dark patch over third and fourth metatarsal bones; forefeet dark above to base of toes, pale on outer and inner sides; tail dark throughout.

Skull narrower than that of *R. r. mindanensis*, the rostrum especially longer and narrower, but fully as deep; in other features essentially similar to *mindanensis*. Tail relatively shorter and occipital part of skull noticeably more elevated than in *R. r. rattus*.

Measurements: Type specimen (followed in parentheses by corresponding measurements of type of *R. r. mindanensis*, USNM 125274, adult male)—Head and body 185 mm (215), tail 190 (220), hind foot, dry 39 (41), ear 23 (23), condylobasal length of skull 42.0 (45.6), zygomatic breadth 20.8 (21.1), incisive foramina 8.5 (9.1), upper tooththrow 7.7 (7.9), length of auditory bulla 7.6 (8.3).

Distribution: Micronesian islands in general, exclusive of Kusaie and the Marshall Islands area. About 300 specimens examined from the following islands and island groups: Tinian, Saipan, Rota, and Guam in the Marianas; Palau, Yap, and Ulithi in the western Carolines; Truk, Ponape, and Ant in the eastern Carolines.

Remarks: The fact that the common large house rats of the Caroline and Mariana Islands are related to the Philippine form *mindanensis* first became apparent when series of specimens were collected by various epidemiological survey parties during the second world war. The logical assumption is that the rats were introduced from the Philippines by Spaniards around the seventeenth century, but it is also possible that the introduction was made by earlier navigators before Europeans entered the Pacific. In any event, the populations on these remote oceanic islands are fairly uniform among themselves, resemble *R. r. mindanensis* in general, and also differ from that form in detail as described above.

For the present I follow the convenient modern practice of treating the various members of this complicated group as subspecies of *Rattus rattus*.

***Apomys sacobianus*, new species**

Type specimen: United States National Museum, No. 304352; adult male, skin and skull; collected 16 August 1956, by D. H. Johnson, original No. 8555.

Type locality: Sacobia River, Clark Air Base, Pampanga Province, Luzon, Philippine Islands.

Diagnosis: A large lowland species of *Apomys*, about the size of the montane *A. major* Miller (?= *datae* Meyer), but shorter-haired, grayer, with lighter feet and underparts, longer hind feet, and a shorter cranial rostrum; larger than *A. abrae* Sanborn and other Philippine species.

Description: Upper parts between Hair Brown and Chaetura Drab

(contrasted with dark Snuff Brown in the type of *major*); underparts becoming progressively paler toward midline, where heavily washed with dull white; feet whitish, with dark dorsal color restricted to upper surfaces and ending at wrists and ankles; tail sharply bicolored, dark above and creamy white below. Skull much as in *A. major*, but with notably longer braincase and shorter rostrum. Cheekteeth comparatively simple, the worn surfaces forming a step-like pattern as in the species of *Melomys*, cusps of laminae barely indicated; second and third upper molars lacking anteroexternal cusp or accessory element; first lower molar with anterior border undivided.

Measurements: Type specimen (followed in parentheses by corresponding measurement of type of *A. major*, USNM 157513, old female) —Head and body 141 mm (143), tail 149 (144), hind foot 40, ear 22, condylobasal length of skull 34.4 (34.6); zygomatic breadth 18.0 (17.3), length of nasals 13.8 (15.1); incisive foramina 5.8 (5.9), upper tooth-row 7.1 (6.5), length of auditory bulla 5.4 (5.3).

Remarks: The generic name *Apomys* is used here essentially as it was used by Mearns, Hollister, and Miller in their respective works, to designate a distinctive group of species that occurs only in the Philippine Islands. Ellerman (Families and Genera of Living Rodents, vol. 3, pp. 54–56 and 73–76, 1949) regards *Apomys* as a subgenus of *Rattus* and includes in it a large number of extralimital forms. Some of the latter, especially *Rattus rajah* and *Rattus alticola*, have different dentition and in my opinion are not related to the Philippine species of *Apomys*. In the simple structure and the step-like manner of wearing of the molar teeth, *Apomys* is closer to the genus *Melomys* than to *Rattus*.

Apomys sacobianus is known only from the type specimen, which was trapped in the narrow forested canyon of the Sacobia River, just above the point where it emerges from the foothills of the Zambales Mountains onto the plains of Pampanga.